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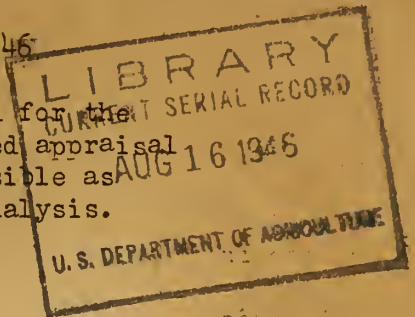
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7-5-45

## ADEQUACY OF MARKETING FACILITIES IN 1946

This is a preliminary review prepared as background for the development of 1946 Production Goals. More detailed appraisal of the adequacy of critical facilities will be possible as actual production proposals become available for analysis.

Summary of Problems

In reviewing the adequacy of facilities for marketing farm products in 1946, transportation appears to be the most critical item. Within transportation the most critical type of equipment will be refrigerator cars. Our refrigerator car fleet is wearing out and is not being replaced. General congestion of trans-continental rail lines incident to intensified military action in the Pacific is hampering efficient use of the refrigerator cars that are available, especially in moving West Coast perishables. This calls for extreme care in planning 1946 vegetable acreage for fresh market in areas far from consuming centers.

Both cold storage and dry storage will present difficulties in West Coast ports. The over-all storage situation, however, should be somewhat easier next year, assuming that no large-scale purchase-and-storage operations are undertaken for supporting prices of perishables. The container situation should be no worse and may be better, but continued container conservation and salvage should be planned. Processing facilities are generally adequate, although there will be need for detailed examination of proposed production goals to avoid local processing problems.

Behind all phases of the handling of farm products in 1946 stands the question of labor supply. It can be a real bottleneck restricting materials, supplies, equipment and handling operations. The national labor shortage is expected to ease by next year as war production slackens, but the food industries and some of the industries providing supplies for handling foods are typically lower-wage industries than others with which they will compete for labor. Hence, even though the general labor situation eases, the marketing of farm products may continue to be restrained by labor shortage.

The sections that follow discuss in some detail the prospective adequacy of these facilities, and outline some of the alternative courses of action for dealing with the major problems that are anticipated.

Transportation

Transportation difficulties have hampered the handling of our agricultural output so far in 1945. They will likely be the principal limiting factor for marketing in 1946.

Our transportation system has deteriorated under the unprecedentedly heavy burden imposed upon it during the war. Replacements have been limited and the increased freight movements have been handled largely through more efficient use of the existing equipment -- heavier loading, elimination of empty back-hauls, decreased time allowance for loading and unloading, and consolidation of routes. As these measures have already been extensively put into practice, it is doubtful that further economies can be effected in 1946. Although the labor situation may ease and more extensive replacement of equipment may be anticipated next year, the strain on our transportation system will increase as the concentration of our war efforts in the Pacific gains momentum.

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Great care must therefore be observed in the establishment of crop goals, lest some less essential crops be produced in relative superabundance and subsequently compete with indispensable commodities for the limited transportation facilities. Special attention must be given to the proper distribution of desired acreage and production by States in accordance with available transportation facilities. In planning 1946 production of highly perishable products, very special consideration should be given to the limitations of transportation, particularly in those areas remote from markets.

### Railroads

The load of agricultural products railroads will be called upon to handle may be increased by some further shift from motor truck to rail. The proportion of food moved by trucks has been decreasing since 1940 and while more new trucks and tires are expected to be available next year, it is doubted that any relief will come to the railroads from that source. Brief comments follow on the adequacy of the principal types of equipment required for carrying farm products.

#### 1. Boxcars

The heaviest single use of boxcars in agricultural marketing is the movement of grain and grain products. Grain is so fundamentally important in the food supply that acreage goals should not be restricted because of current transportation difficulties or any that are expected to develop. Variations in yields rather than in the acreage planted are largely responsible for variations in total grain production, and prospective transportation needs cannot be estimated far in advance of the growing season. Whatever grain is produced must be moved even at the cost of temporarily delaying the shipment of other commodities which may compete for the same transportation facilities.

The boxcar building program has been inadequate up to this time but may be expected to bring some relief by the time 1946 grain crops are harvested. Fortunately, grain is not as highly perishable as many other agricultural products and cars for its transportation can be built relatively cheaply and rapidly. In emergency, hoppers and other types of cars have been and may again be used in shipping grain.

Although the boxcar situation promises to be easier in 1946 than in 1945, some difficulties and spot car shortages may be anticipated on transcontinental roads serving the winter and spring wheat areas.

#### 2. Livestock

Available livestock cars should be adequate to meet all needs that may reasonably be anticipated in 1946. More hogs will probably be marketed in 1946 than in 1945, but unless cattle are marketed in unprecedented numbers rail transportation is unlikely to be a serious problem. More than half of the livestock has continued to move by trucks.

Facilities for shipping live poultry over long distances are relatively abundant as the result of an increased percentage of poultry marketed in processed form and an expansion in broiler production in areas close to consumer centers. There has been no significant shift in transportation from truck to rail.

#### 3. Tank Cars

Animal and vegetable oils for human consumption have been given favorable priority. They require only a small proportion of the entire tank car fleet anyway. Hence, the supply of cars has been adequate to meet all essential movements.

Shipping of milk by rail from distant producing areas to several of the large fluid milk markets has increased appreciably, but no serious inadequacies of equipment have developed. Additional milk tanks of various types for railway transportation are being built to meet 1946 requirements.

#### 4. Refrigerator Cars

A serious shortage of refrigerator cars and a slowing up of their operation due to congestion at terminals is already interfering with the marketing of perishable farm products. Stringent limitations on their movement will be necessary in 1946 unless an extensive car-building program is carried through and unless there is some general relief of rail congestion, especially on transcontinental lines. Neither remedy is now in prospect.

The number of refrigerator cars, both railroad and privately owned, has decreased materially during the war. Indications are that replacements will continue to fall substantially short of car retirements during the remainder of 1945 and in 1946.

#### Freight refrigerator cars in service

Year	Railroad	Private	Total
1941	21,260	125,059	146,319
1942	21,221	120,252	141,473
1943	20,878	119,765	140,643
1944	20,459	118,142	138,601
1945(April)	20,407	118,003	138,410

Aging of the equipment has been greatly accelerated by the extremely heavy load carried since the beginning of the war. Besides the increased retirement of cars, the percentage of bad order cars has gone up and especially the number of cars held for heavy repairs.

The car shortage will be made more acute by the strain placed upon the transcontinental railroads incident to the concentration of our war effort in the Pacific. This will be felt in two ways: the unprecedented volume of westbound traffic will make it difficult to get empty refrigerators to the coast; and the eastbound movement of loaded cars will meet the westbound traffic in congested terminals. Both of these factors will increase the turn-around time of refrigerator cars and thus limit the supply available in other parts of the country.

The extent of a further shift from truck to rail transportation in the movement of fresh fruits and vegetables and dairy and poultry products cannot be conclusively estimated. However, it has been consistent since 1940, and there are reasons to doubt that it will be substantially reversed by 1946. From 1940 through 1944, this shift for the 14 leading fresh fruits and vegetables alone was equal to the hauling capacity of 4,755 refrigerator cars. Assuming a comparable shift for other fresh fruits and vegetables, the demand for refrigerator cars to replace the withdrawn trucks increases to 6,790. (This assumes a turn-around period of 30 days for refrigerator cars -- reasonable in view of the traffic congestion on transcontinental rail lines.)

With approximately 8000 refrigerator cars retired since 1941, with the number of cars out for heavy repairs increased by more than 2000 in the period January 1, 1944 to April 1, 1945, and with the entire refrigerator fleet aging rapidly under unprecedentedly heavy traffic, it is highly unlikely that the shortage of refrigerator cars will be relieved in 1946. The urgent need for additional cars is more pressing now than at any time during the war. Immediate construction of at least



10,000 cars is needed. Reasons for this poor performance are varied: shortages of labor and materials, priority given construction of other types of equipment required by the Army, possibly some lack of aggressiveness on the part of companies in pushing for fulfillment of their authorized construction contracts. The War Food Administration has pressed vigorously but so far unsuccessfully for a larger program. There seems to be little possibility that we can get more than a fraction of the required 10,000 cars built in time for moving 1946 production.

Even if the cars were obtained, relief of congestion impeding their transcontinental movement is unlikely until after the end of the Pacific war. Shipment of civilian foodstuffs cannot in general be given precedence over movement of vital military freight. Partial relief might be afforded if the Army could further diversify its routes of Pacific supply, with more even division of traffic between the several West Coast ports and greater use of Eastern ports and the Panama Canal.

In view of the refrigerator car outlook, special attention should be given to getting the required production of fresh vegetables in areas which will minimize the requirements for transportation.

The fact that the 1945 acreage planted to fresh vegetables materially exceeded the goals agreed upon, has contributed materially to this year's extremely critical refrigerator car situation. Prospects are that priorities may have to be established. (Two temporary embargoes on loadings have already been imposed.) As a result, there will likely be losses of fresh fruits and vegetables because of inadequate shipping facilities.

Unless goals for fresh vegetables, specified by areas, are determined and announced sufficiently in advance to permit farmers to plan their operations, and concerted efforts are made to get actual plantings more closely in line with the goals, serious transportation difficulties are almost certain to arise in the marketing of the 1946 production of fresh fruits and vegetables.

The extent of the inadequacy of transportation facilities cannot be determined until total needs in terms of tentative production goals have been made known. The examination of these goals in the light of their feasibility from the standpoint of adequacy of marketing facilities will serve as the basis of recommendations for adjustments in specific production areas.

#### Trucking Facilities

So far as present indications permit judgment, the most critical situation in civilian truck transportation is likely to be passed in the fall of 1945. In 1946 new trucks and replacement tires should become available to satisfy essential requirements.

Obviously, however, the accumulated deficit of tires and trucks cannot be overcome quickly. Prior to the war production of trucks averaged around 750,000 per year. The manufacture of light trucks ceased at the start of the war and was not resumed until early in 1945. Production of medium trucks was resumed in 1944 and has continued on a limited scale. The announced commercial motor truck program for all uses for 1945 allots truck manufacturers quotas totaling 233,472 units. An additional contingent program of 188,700 units has been provisionally approved but there is no assurance that this schedule will be carried out.

Present replacement needs of farm trucks have been estimated at 200,000. Indications are that only about 60,000 new trucks will be made available to farmers in 1945.

Large truck tires have been very short in supply and such tires manufactured from synthetic rubber have been found much shorter in average life than prewar natural rubber tires. The importance of observing the 35-mile speed limit has recently been reemphasized by the War Production Board.

Wartime conservation and increased efficiency in the use of available equipment have maintained truck numbers better than was expected. However, these economies could not overcome the increasing scarcity of repair parts (particularly for older models) and the shortage of experienced mechanics and truck drivers. The maximum utilization of the available trucks has resulted in their more rapid deterioration. The new trucks whose production is authorized will go mostly to replace equipment that would normally have been junked long since. They will not represent an addition to total available trucking equipment.

Hence, there will be continuing need for conservation of both trucks and tires in 1946. In particular there is little prospect that enough new tires and trucks will become available to reverse very soon the continuing shift of agricultural traffic from truck to rail. The total load moved by trucks during the war has not materially decreased, but the marked increase in total tonnage of agricultural products has been handled mostly by railroads. Thus, the proportion moving by truck has declined. This decline is bound to continue as long as the mortality of trucks exceeds the rate of replacement.

#### Storage

All indications point to a continued easing in the over-all cold storage situation. If available facilities are properly used no difficulties should develop in 1946 in the seasonal storage of refrigerated commodities.

This assumes, however, that there will be no large-scale accumulation of perishables in storage through Government purchase programs to support prices. Existing storage facilities are designed for seasonal operations; they would rapidly be overtaxed under any substantial year-to-year accumulation of surpluses in storage. Storage of price-support surpluses of perishables rather than disposal of them currently through distribution and diversion programs would be impossible without considerable expansion of the nation's cold storage facilities.

Local storage problems will likely occur in port cities, however, especially on the West Coast. The increased demand for space incident to the shift of the war to the Pacific is already taxing available facilities there. A tendency toward further concentration of freezer commodities in ports is anticipated.

This problem will be eased somewhat by the 10 million cubic feet of convertible cold storage space that will come into use this year. This additional space will be chiefly in the port cities or at inland points that handle commodities in transit to the ports. Congestion of cold storage facilities in the port cities in 1946 can be relieved if proper use is made of unoccupied space in the inland cities.

#### Containers

The shortage of containers promises to be only partially relieved in 1946. Military needs for overseas shipments are expected to be high, and supplies of materials will continue limited.

Efforts are being made to assist the container industry in increasing the available supply of packages. That part of the industry which is engaged in making wooden packages for foods, the pulpwood and container-board, and the cotton textile



mills have been given a production urgency rating by the War Production Board equal to the regular military. This will give these industries every possible assistance in securing materials and manpower.

Even so, supplies will be insufficient to meet all container demands. Containers should be ordered well in advance of need and (subject to inventory limitations of various WPB orders) deliveries should be accepted as soon as they can be made. Practicable container substitutes will have to be used extensively and continued efforts made to encourage greater salvage and re-use of containers.

The following sections discuss briefly the situation with respect to the chief types of containers. More specific estimates of total container requirements in 1946 and the actions that will need to be taken to meet essential needs must await the preliminary figures on production that is planned of various farm products needing packing.

### Wooden Containers

There are ample facilities for manufacturing boxes, crates, baskets, and other wooden containers for farm products. The limiting factors are materials and labor. As war demands for wood and wood products will continue high through 1946, only a considerable easing in the over-all manpower situation may be expected to bring relief.

Supplies of veneer baskets, hampers, wire-bound boxes and other wooden containers are dependent upon the labor available for cutting and hauling logs and for work in mills. Lumber production is inadequate and inventories are low. Supplies of lumber are allocated quarterly by the War Production Board. Allocations for fruit and vegetable containers have been below estimated requirements for each of the first three quarters of 1945, the reductions varying according to the priority rating of the commodity for which the containers are to be used. Since no satisfactory substitute container material for Ponderosa pine is available in the West, the fruit and vegetable industry in that region has received preference over claimants for this lumber from other areas. In spite of this preference rating, box production for fruits and vegetables dropped during the first half of 1945 as compared with 1944.

Thirty-dozen egg cases have likewise been a problem. The customary case has been made of veneer or light sawn lumber. Fiberboard has been turned to as a substitute and in 1944 and 1945 about 85 percent of civilian egg cases have been made of fiberboard.

### Barrels

The wooden barrel situation is expected to continue extremely tight and substitute containers will have to be used. During 1944 a shortage of slack barrels for powdered eggs developed and it was necessary to use substitute containers in moving dried eggs from processing to packing plants. The reduced volume of egg drying in 1945 has relieved this difficulty. Barrels for bulk condensed milk are in short supply and requirements are likely to be higher next year. Paper bags have been used in 1945 for milk powder, but they are an acceptable substitute for barrels only for emergency shipments.

The shortage of labor among cooperage companies suggests the need for users of barrels to place their orders well in advance of need in order that factories may spread production over a long period.



## Paper and Fiberboard

The same difficulties confronting the lumber industry have also been encountered by pulp and pulpwood manufacturers. Although the quantity of pulp produced has increased from 1940 to 1945, the off-shore requirements for V boxes not only have used up all of the increase in production but have cut deeply into the quantities formerly available for domestic use. Indications are that paper and paperboard for wrapping and packaging farm products and processed foods will continue to be scarce in 1946. This will affect a wide variety of commodities; fruits and vegetables using paper bags and liners, and fiberboard boxes and cartons; eggs retailed in one-dozen consumer cases; and a wide range of packaged processed food products.

## Bagging and Textiles

Demands for bagging materials for military use, lend-lease, and relief for liberated countries, plus restricted importation of burlap have greatly reduced the supply for domestic use. Open mesh bagging, being easily produced, is expected to be in sufficient supply to cover all requirements for packaging fruits and vegetables. Enough light-weight ( $7\frac{1}{2}$  - 8 oz.) burlap is expected to meet potato crop requirements if there is maximum re-use of used bags. Difficulties have been encountered in securing heavy-weight burlap bags, but the outlook for 1946 appears more favorable. Burlap has not been made available for sheets for moving tobacco from auction floor to re-dryer.

In general we can expect continued need for conservation and re-use of bags and bagging material in 1946.

There are practically no inventories of cheesecloth and production of bandages will need to be increased some 50 percent to meet prospective requirements.

## Metal Containers

Sufficient tin plate is being made available to permit unlimited use of it in canning the four major vegetables and to provide for essential needs in other items. The present prospect is that this situation should be no worse in 1946. The output of #10 cans and evaporated milk cans, however, is limited by a shortage of manufacturing equipment. Requirements should therefore be anticipated early and every effort made to build up stockpiles in the off seasons.

## Processing Facilities

Facilities for processing 1946 agricultural production are generally expected to be adequate. Anticipated difficulties in processing reflect primarily shortage of labor to operate the plants rather than of physical plant and equipment itself. The following sections discuss the outlook for processing fruit and vegetables, dairy and poultry products, and meats -- the chief commodity groups that have presented major problems during the war.

## Fruits and Vegetables

The physical facilities for canning, freezing, and dehydrating fruits and vegetables are more than adequate for handling any output that is likely to be required in 1946. A record pack of fruits and vegetables was canned in 1942 and existing capacity could have handled a substantially larger quantity. The following table illustrates this with figures for a few of the principal

Fruit and vegetable processing: Selected items of 1942 pack as a percentage of estimated practicable physical capacity

Commodity	1942	Estimated	1942 pack as
	Pack	available	percentage of
	Mil. case	capacity	capacity
	<u>1/</u>	Mil. case	Percent
Peas	36.0	72.0	50
Corn	32.0	56.0	57
Beans, snap	24.0	42.0	57
Tomatoes	41.0	80.0	51
Peaches	16.2	26.0	62
Pears	5.9	12.0	49
Apricots	3.2	10.0	32
Fruit cocktail and mixed fruit	5.6	8.0	70

1/ Vegetables, basis 24-2's; fruit, basis 24-2½'s.

Dehydration has been built to a point likewise providing excess capacity in most lines, and capacity for freezing fruits and vegetables fully covers present facilities for distributing them.

The current policy with respect to plant maintenance and replacement of equipment is to give prompt approval to all requests for priorities for bonafide replacements. Approved orders are being promptly filled. The equipment situation should be easier next year.

This does not mean, of course, that vegetables for processing should be planted without regard to the facilities locally available. With the prospect of a continuing acute shortage of transportation, production should not be planned that will require shipment long distances to processing plants. Goals in each area should be restricted to the output that can be handled in local plants.

This same comment applies to the diversion to processing of surpluses of vegetables grown for fresh market. In the past few years there have been a number of instances of government programs for supporting markets for fresh vegetables by diverting surpluses to processing plants in other areas. Such programs have proved to be impractical and uneconomical. Tomatoes, peas and other perishables for processing do not lend themselves to long-distance shipment. Operations of this sort will become less and less feasible as refrigerated rail transportation becomes tighter. Goals for vegetables for fresh market should be distributed with this problem in mind.

The real bottleneck in fruit and vegetable processing this year will be shortage of labor and shortage of sugar. Whether these two shortages will be as critical for 1946 production cannot yet be foreseen. With regard to the sugar shortage, restrictions were imposed in 1942 on the quantities of sugar that could be used in processing. The attempt to require still further reductions this year is causing difficulties in the case of fruits and a few of the vegetable items.

#### Dairy Products

With the installation of equipment now scheduled, physical facilities for processing fluid milk and manufactured dairy products will be ample to meet any requirements that may reasonably be expected in 1946, provided that the distribution of the total milk supply among different uses remains essentially



the same as in 1945 and there is no further substantial shift from farm separation to the delivery of whole milk. This is true even allowing for an increase in total milk production in line with the more favorable milk-feed price ratio.

Some difficulties may be encountered with respect to plant maintenance and replacement of equipment. Can washers, for example, are reported most difficult to replace and other items require long delivery periods. A program assuring the availability of anticipated replacement needs and the prompt filling of orders may be desirable in the planning of the 1946 dairy production and marketing program. However, this need may be obviated as reconversion of war industries to civilian production progresses.

### Poultry Products

Poultry processing plants are considered adequate to meet any requirements that may be reasonably expected in 1946. The problem will be getting sufficient labor to keep the plants operating at capacity. Prisoner-of-war labor has been used to some extent and this will not be available in 1946.

The securing of various equipment items such as poultry feeding batteries, pickers, and scalders has been attended with serious difficulties. As an illustration, feeding batteries were manufactured before the war by a dozen or so of concerns, while they are today manufactured only by one plant having a capacity of 200 batteries a week, with unfilled orders of 5,600 on hand. Extensive replacement needs are indicated in feed mill equipment.

There is a substantial excess capacity of egg drying facilities and sooner or later, as lend-lease demand for egg powder falls off the problem will be the conversion of excess drying plants to other uses.

### Livestock and Meats

Packinghouse facilities, as a whole, are fully adequate to handle the volume that may be expected in 1946. No serious difficulties have been experienced in 1945. The labor situation, which had been one of the limiting factors in the spring of 1944 when slaughter assumed unprecedented proportions, may give rise to some difficulties, should slaughter increase materially in 1946. However, these difficulties are expected to be confined to local areas.

### Labor

Growing labor shortages are a limiting factor affecting all categories of food handling and processing in 1945. Although the over-all labor situation will doubtless ease appreciably in 1946, there is no assurance that the anticipated cut-backs in war production will release an adequate labor supply for food industries.

The difficulties in obtaining an increased labor supply commensurate with increased production requirements have been aggravated by the relatively low wage rates in food industries as compared with those prevailing in war industries. The industries competing with foods for the increasing supply of labor will be those producing the durable civilian goods most urgently demanded such as radios, refrigerators, washing machines, tractors, automobiles, etc. The wage rates in these industries are substantially above those prevailing in food industries.

Hourly wages in food industries, in war production,  
and in expanding civilian industries

Food industries	Cents per hour (March)	War industries and expanding civilian industries	Cents per hour (April)
Meat packing	86.8	Transportation equipment	129.7
Butter	93.0	Locomotives	133.3
Condensed and evaporated milk	76.8	Cars (electric and steam)	119.6
Ice cream	82.6	Aircraft and parts	119.5
Flour	86.4	Aircraft engines	132.8
Feeds	--	Radios and phonographs	93.4
Cereals, prepared	98.8	Tractors	115.5
Baking	85.7	Agricultural machinery	115.1
Sugar, refining, cane	98.0	Typewriters	101.1
Sugar beet	76.1	Washing machines	106.6
		Refrigerators	113.0

Another factor which is expected to add to the difficulties in the manpower recruitment problems of the food industries is the various unemployment compensation statutes, which provide payments varying from \$15 to \$21 a week for a period of 12 to 26 weeks, depending upon State laws. These statutes provide for the payment of unemployment compensation as long as the worker is available in his usual occupation. Those workers who have hitherto been employed in higher paid industries will not forfeit employment compensation by accepting employment in food industries.

Full use is being made of prisoner-of-war labor in 1945, but this source of labor supply will be largely eliminated by 1946.

Therefore, assuming the continuance of high food requirements in 1946, it appears that food industries may again face a difficult labor problem which is unlikely to be alleviated by a relaxation of labor market controls. In fact, increasing competition in the labor market may be expected to accentuate the problem.

Labor difficulties will affect not only food processing but also other industries essential to food handling -- the lumber and container industries; warehousing, where acute spot labor shortages as well as chronic lack of help have limited the full use of space; and transportation, where labor requirements will be stepped up.

The Department will need to present vigorously to the War Manpower Commission the continuing need that imported labor be made available for food processing and other handling. Critical food industries might well be urged to seek authorizations for wage-rate adjustments, and they should continue to be given assistance in presentation of such requests.

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